

A NEW HUMAN NEMATODE *STRONGYLUS GIBSONI*, n. sp.

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Some time ago I received from Dr J. Bell, Civil Hospital, Hong Kong, some nematodes for diagnosis. The following history accompanied them:—'They were found by Mr. Adam Gibson, Colonial Veterinary Surgeon, in the faeces of a Chinaman employed at the Slaughter-house, Hong Kong.'

There were ten ♂♂ and nine ♀♀. On examining the males, it was evident that they were probably new species of Strongylidae from the configuration of the male bursa and the extremely long delicate spicules which were extruded in several of the specimens. Prof. Looss, to whom I sent them for examination, wrote: 'The worms you sent are new to me; I only know one similar form which I found in hares from the neighbourhood of Sawakin.' The state of preservation was unfortunately very poor, the specimens being much distorted, and giving the impression of having been partially dried at some time or other. The bursae, however, had preserved their contour fairly well, and in one or two specimens it was possible to observe the uterine and anal openings in the female.

The male.—21 mm. long and 0.4 mm. thick towards middle. Head attenuated. Two lateral papillae occur, one on either side of the buccal orifice. About 0.45 mm. behind the head are situated two cervical papillae (fig. 1).

The Bursa.—Visible to the naked eye is a bilateral appendage. Each lobe is a concave-convex lanceolate expansion, the tip of one folding over that of the other. The plane of the lobes lies in the dorso-ventral plane. Dorsally the edges of the lobe are continued forwards, meeting to form a long V-shaped slit, while posteriorly the edges run a parallel course until they curve inwards at the tip (fig. 2). Ventrally the lobes have, a little in front of their origin, two well-

marked sub-conical lobules, otherwise the ventral edge is uniformly curved from base to apex (fig. 3).

The disposition of the rays as far as could be seen was as follows:

Dorsally. An (anterior) ray terminates in a papilla about the middle of the dorsal edge; (*a*) behind this are two (median) rays, the posterior of which is the larger, and is curved inwards before it reaches the margin. Finally two rays diverging from a common stem end in papillae at the tip of the bursa (fig. 4).

Ventrally. A ray terminates in each of the ventral lobules (fig. 5). It was not possible to trace any of these rays from their origin from the central mass.

The distance from the base of the bursa (dorsally) to the tip of the folded and curved lobes is about a millimetre.

Appendages of the genito-anal opening.—Dorsally there is a prolongation of the subcuticular layer, which bifurcates posteriorly into two appendages which appear to have papillae. Anteriorly this is bounded by a crescentic line (fig. 6). Laterally on either side there is a small lobule.

Ventrally there is a conical plate with chitinous margin, and closely applied to it dorsally a larger crescentic plate, also with chitinous margins, the anterior portion of which is continuous with the ventral edge of the bursa (fig. 7).

The Spicules are about 7 mm. long, thus occupying about one-third of the length of the body. In figs. 8 and 9 they are shown in different stages of extension.

The female is about 25 mm. long. The tail end is pointed, and in some specimens somewhat curved. The anus is situated 0.2 mm. and the uterine opening 0.5 mm. from the tip. The eggs in utero measure $110 \times 53 \mu$ (fig. 10).

The worms are represented in their natural size in fig. 11.

1/10 mm.

1.



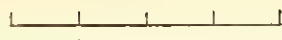
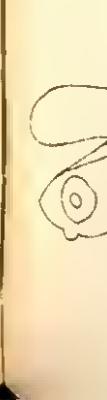
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2.



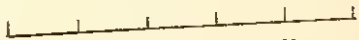
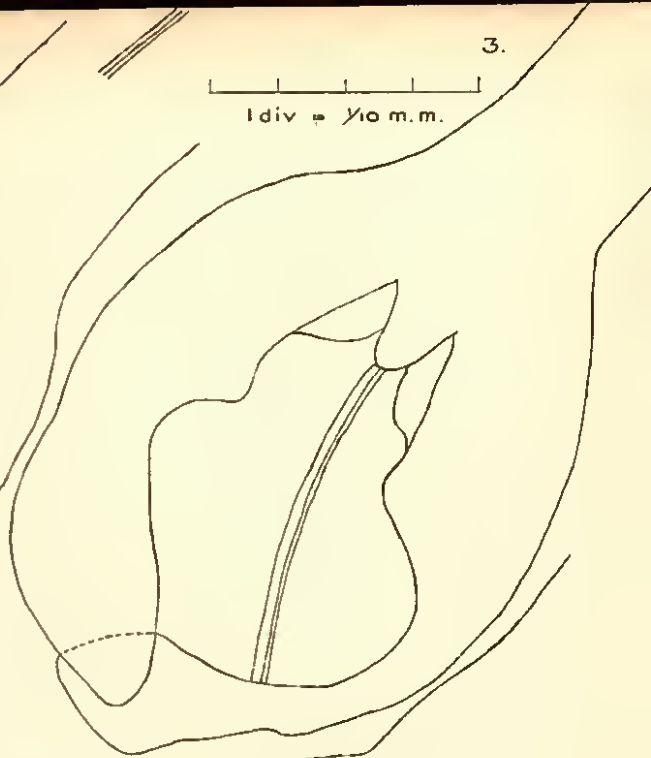
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4.



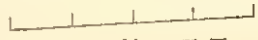
1 div = 1/10 mm.

3.



1 div = 1/10 mm.

5.



1 div = 1/100 mm.

6.

